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Conference Abstract

Sustaining Software for Biological Collections Computing

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Abstract

Specify is a biological collections data management platform for the digitization, curation, and dissemination of museum specimen information. The Specify Software Project and its predecessor, the MUSE Project, have been funded by the US National Science Foundation for 30 years. Specify 6, a native desktop app is used in about 500 biological collections for specimen data processing. The latest generation, Specify 7, is a web platform for hosting collections data in the Specify Cloud service or on an institutional server.

During 2017 and 2018, with encouragement from its long-time funder, the Specify Project is 'transitioning-to-sustainability', in a campaign to identify an organizational structure and sources of revenue to support the Project's software engineering, help desk and data management services. A museum consortium dedicated to maintaining and evolving Specify Software is a probable outcome. Such a non-profit consortium would formally engage institution directors, collections researchers, and biodiversity informaticists in the governance of Specify. Each group would play a significant role in determining the direction and capabilities of consortium software products and services. In this paper, we will summarize our approach with the Specify transition.

The Specify Project's transition to sustainability is not unique within the research museum community. In the United States, groups that produce Symbiota, Arctos, and GeoLocate, as examples, face a similar quest. As legacy funders look to data communities to underwrite more of the ongoing expense of research cyberinfrastructure, projects seeded with grant

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funds that contribute to the overall suite of collections digitization and management software solutions will, sooner or later, face this existential challenge. Significant questions of research community economics present themselves. How much can collections institutions, of all sizes and budgets, afford to pay for specimen data software platforms and services? Will the significant cost of collections software development and support lead to sustained, collaborative, community-wide efforts, similar to the way that members of professional societies pool resources (including endowments) to provide journal and annual meeting 'infrastructure'? Or will the high cost of software, security and systems management, etc., drive wealthier museums to outsource software development by licensing commercial products, and relegate collections unable to afford software licenses, to bespoke, simple, or no software solutions?

This session will include project case studies on the economics of collections research cyberinfrastructure and present perspectives and paths to long-term sustainability.

Keywords

Specify, software, database, museum, collections, specimens, business model, sustainability

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